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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,663	06/20/2003	Antonio Gomez	200309525-1	5679

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EXAMINER

LIANG, LEONARD S

ART UNIT PAPER NUMBER

2853

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8m

<b>Office Action Summary</b>	<b>Application No.</b> 10/600,663	<b>Applicant(s)</b> GOMEZ ET AL.	
	<b>Examiner</b> Leonard S. Liang	<b>Art Unit</b> 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-20 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/22/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

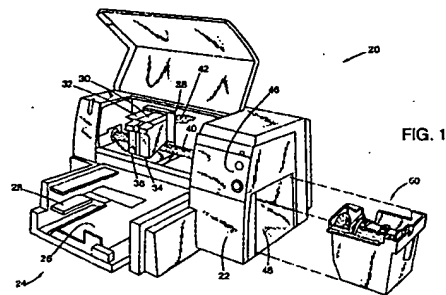
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

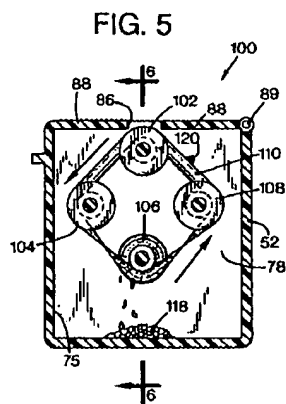
Claims 1, 3-7, 10-12, 15, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al (US Pat 5617124).

Taylor et al discloses:

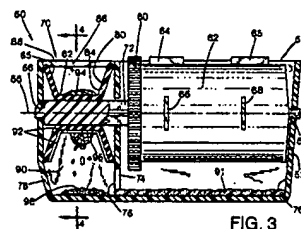
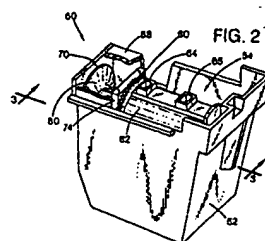
- {claim 1} A spittoon system for a printing mechanism having a printhead with a substantially linear nozzle array oriented in a first direction (figure 1, reference 34); a frame (figure 1, reference 52); a roller mounted to the frame for rotation about an axis oriented in the first direction to receive ink spit from the printhead (figure 1, reference 50; figure 2, reference 70; it is naturally suggested for the linear nozzle array to be oriented in the same direction as the axis through the roller mounted in the frame; this is because the axis through the roller mounted in the frame is oriented in the same direction as the shaft that holds the scanning carriage. It is well known to one of ordinary art that the linear nozzle array for a printhead can be aligned in the same direction as the dimension of reciprocation of the print carriage, especially when the recording medium is being fed perpendicularly to the direction or reciprocation of the carriage)



- {claim 2} a second printhead (figure 1, reference 36); a second roller mounted to the frame for rotation and about a second axis oriented in the first direction to receive ink spit from the second printhead (figure 5, reference 102, 104, 106, 108; column 5, lines 47-58)



- {claim 3} a second printhead, wherein the roller is oriented to receive ink spit from the second printhead (figure 1, reference 36)



- {claim 4} a drive motor coupled to rotate the roller (column 2, lines 36-39; column 4, lines 15-46)
- {claim 5} a gear train which couples the motor to the roller (figure 3, reference 60; column 2, lines 36-39; column 4, lines 15-46)
- {claim 6} the frame defines a waste ink reservoir located to receive waste ink from the roller (figure 3, reference 96)
- {claim 7} a liner of an absorbent material located within the waste ink reservoir (figure 3, reference 91)
- {claim 10} A method of purging waste ink from a printhead of a printing mechanism having printheads for dispensing ink (figure 1); positioning at least some of the printheads over rollers; and purging waste ink from the printheads onto the rollers (figure 5; column 5, lines 47-58)
- {claim 11} the printheads have nozzles which dispense the ink, and the positioning comprises positioning the rollers a substantially uniform distance

from the nozzles (figure 1, reference 34, 50; column 2, lines 31-60; inherent when printhead moves over service station 50)

- {claim 12} wherein the printheads form a first contour and the positioning comprises positioning the rollers in a second contour similar to the first contour (figure 1, reference 34, 50; column 2, lines 31-60; inherent when printhead moves over service station 50)
- {claim 15} A spittoon system for a printing mechanism having a printhead with a substantially linear nozzle array oriented in a first direction (figure 1, reference 34); means for receiving ink spit from the printhead (figure 1, reference 50); means for rotating the means for receiving ink about an axis oriented in the first direction (figure 5, reference 102, 104, 106, 108; column 5, lines 47-58; naturally suggested as applied to claim 1 above)
- {claim 16} wherein the printing mechanism has a second printhead with a substantially linear nozzle array oriented in the first direction (figure 1, reference 31 and 36); means for receiving ink spit from the second printhead (column 5, lines 47-58)
- {claim 17} means for storing waste ink (figure 3, reference 96)
- {claim 18} means for scraping waste ink from the means for receiving ink (figure 3, reference 90)
- {claim 19} means for scraping waste ink from the means for receiving ink (figure 3, reference 90); means for storing ink waste ink (figure 3, reference 96); means for absorbing waste ink in the means for storing (figure 3, reference 91); wherein

the means for rotating comprises a motor and means for transferring rotational motion from the motor to the means for receiving ink (column 2, lines 36-39; column 4, lines 15-46)

- {claim 20} A printing mechanism (figure 1); a chassis defining a printzone and a servicing zone (figure 1, reference 22); a printhead having a substantially linear nozzle array oriented in a first direction (figure 1, reference 34); a carriage which moves the printhead through the printzone and the servicing zone (figure 1, reference 38); a frame located in the servicing zone (figure 3, reference 52); a roller mounted to the frame for rotation about an axis oriented in the first direction and located to receive ink spit from the printhead (figure 1, reference 70; naturally suggested as applied to claim 1 above)

Taylor et al (US Pat 5617124) differs from the claimed invention in that it does not explicitly disclose a printhead with a substantially linear nozzle array, which is oriented in the same direction as the axis through the roller mounted to the frame.

However, Taylor et al naturally suggest a printhead with a substantially linear nozzle array, which is oriented in the same direction as the axis through the roller mounted to the frame. The reason for this is given in the note section of the claim 1 rejection above.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Taylor et al. The motivation for the skilled artisan in doing so is to gain the benefit of provide an inkjet printing mechanism which prints sharp vivid images without requiring operator intervention to regularly remove waste ink from the printing mechanism (column 2, lines 50-53).

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al (US Pat 5617124) in view of Leemhuis (US Pat 6733106).

Taylor et al discloses:

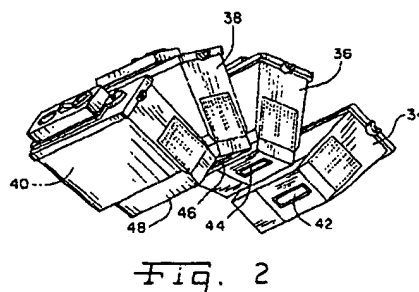
- {claims 13 and 14} a method (as applied to claim 12 above)
- {claim 13} the second contour comprises an arcuate shape (figure 2, reference 70)
- {claim 14} the second contour comprises a semicircular shape (figure 2, reference 70)

Taylor et al differs from the claimed invention in that it does not disclose:

- {claim 13} the first contour comprises an arcuate shape
- {claim 14} the first contour comprises a semicircular shape

Leemhuis discloses:

- {claim 13} the first contour comprises an arcuate shape (figure 2, reference 42, 44, 46, 48)



- {claim 14} the first contour comprises a semicircular shape (figure 2, reference 42, 44, 46, 48)



It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Leemhuis into the invention of Taylor et al. The motivation for the skilled artisan in doing so is to gain the benefit of having a printhead contour alignment that more effectively corresponds to the radial nature of the maintenance station.

### *Allowable Subject Matter*

Claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 8 discloses “a second roller mounted to the frame for rotation and about a second axis oriented in the first direction to receive ink spit from the second printhead; a third roller mounted to the frame for rotation and about a third axis oriented in the first direction to receive ink spit from the third printhead; and a fourth roller mounted to the frame for rotation and about a fourth axis oriented in the first direction to receive ink spit from the fourth printhead,” which was not found, taught, or disclosed in the prior arts.

Claim 9 depends from objected claim 8.

### *Response to Arguments*

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. Though the same art is used as in the previous rejection, the rejection is different.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Klausbruckner et al (US Pat 6880912) discloses a printhead service station.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**MANISH S. SHAH**  
**PRIMARY EXAMINER**